



Lifelong
Learning
Programme



DZS
Centre for International
Services

LIFELONG LEARNING PROGRAMME

LEONARDO DA VINCI
MULTILATERAL PROJECTS - TRANSFER OF INNOVATION 2011,

Project n.: CZ/11/LLP-LdV/TOI/134005

Project name: Vocational Training in Assessment of Existing Structures

Minutes

of the 5th plenary meeting of project partners
held at the University of Pisa, via Diotisalvi 2, on March 14-15, 2013,
and tri-lateral meeting of P1, P3 and P5 on March 16, 2013

Participants:

P1 (contractor) – CTU KI: M. Holický, Jana Pallierová
P2 - SPSS: Roman Gottfried, Vladislava Návarová
P3 – HR: Dimitris Diamantidis
P4 – IETcc-CSIC: Peter Tanner
P5 – UOP: Pietro Croce, Maria Luisa Beconcini
P6 – TNO: Ton Vrouwenvelder - *apologized*
P7- PAU: Selçuk Toprak, Mehmet Inel, Sevket Senel

Presentation LEO_5_Pisa.ppt , used during the meeting, supplements these minutes.

Thursday, March 14, 2013, 2 p.m.

1) Opening of the meeting, 2 p.m. (P5, P. Croce)

P5 (P. Croce) opened the meeting and welcomed the participants. He confirmed the 3rd project seminar to be held the next day, Friday 15 in Aula Magna of the Faculty of Engineering, starting 8:30 a.m. and expected to end at about 1:30 p.m. The seminar program had been sent to partners several weeks before. Then he invited the partners to the dinner organized by the University of Pisa, Department of Civil and Industrial Engineering at the San Domenico restaurant close to the University on Thursday (8 p.m.)

2) Administrative issues, new proposal (P1, M. Holický, J. Pallierová)

P1 informed the partners about successful acceptance of the interim report, namely that the interim report was approved by the N.A. with only negligible deductions. The second pre-payment is expected to be sent to our account by the end of March.

Partners were reminded of the products which are to be developed or improved in the second term of the project, namely:

- e-learning (partners are expected to send their contributions in English by the end of April),
- software tools for practising engineers (partners are expected to send their contributions by the end of May),
- national short term courses, which are still expected to be organized in Germany, Italy and Turkey
- contributions to technical journals (so far two contributions have been published in the Czech technical journal *Stavebnictví*); regarding the length of time it takes to publish an article, it is possible to assert that it is in the submission/processing stage .

Furthermore, P1 summarized and presented to the consortium the results of three bilateral meetings of P1 and P2, and one bilateral meeting of P1 and P3, which were held at the Klokner Institute during the first half of the project.

Partners were also informed of the submission of a co-prepared new proposal to the Call for Proposals 2013 of the LdV Programme, entitled Innovation Transfer in Risk Assessment and Management of Aging Infrastructures.

P5 (P.Croce) will provide the partners with the Italian National annex to EN 1990.

3) Seminar in Budweis (P2, R. Gottfried, V. Návarová)

P2 invited the partners to a national seminar, which they are going to organize on May 23 at the Secondary Technical School in Budweis, and an excursion to the nearby historical town of Český Krumlov, which is planned for the following day.

The program of the seminar was outlined as follows:

Registration 13:30 - 14:00

1st part 14:00 – 15:50

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|------------------------------------|--------|
| • Introduction (Gottfried, Kostka) | 15 min |
| • Assessment Principles (Holický) | 15 min |
| • Current Standards (Diamantidis) | 20 min |
| • Assessment Procedures (Návarová) | 30 min |
| • Partial Factors (Gottfried) | 30 min |

Break 10 min

2nd part 16:00 – 18:00

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| • Statistics and Reliability (Holický) | 20 min |
| • Examples (Tanner) | 30 min |
| • Examples (Diamantidis) | 20 min |
| • Examples (Gottfried, Návarová) | 20 min |
| • Discussion (Holický <i>et al</i>) | 20 min |

It is expected to hear from P7 (Pamukkale University) regarding the confirmation of their participation.

4) Discussion of working materials for Handbook 2 (P5, P. Croce)

HB2 should be available by 31/5/2013. P5, P. Croce is responsible for the final completion of the texts. For economic reasons the book will be finalized (typesetting, layout and DTP work) and printed in the Czech Republic.

Materials which have been developed so far:

- **Chapter 1: Basic concepts and terminology** (P1, P4, P5) - 17 pages
- **Evolution of past European national codes (previous Chapter 2)** will be condensed into a paragraph to be incorporated into Concluding Remarks regarding internationally valid codes (CEN, fib, UNESCO).
- **Chapter 2: NDT, inspection techniques & monitoring** (P5, P1, P2, P4, P7) – P4 (P.Tanner) – 25 pages
Will be completed by P5 (P.Croce) incorporating materials by P4.
- **Chapter 3: Modelling and analysis** (P5, P7) – 15 pages
By the end of March, P7 (S.Toprak) will have sent his materials to P4 (P.Tanner). By the middle of April, P5 (P.Croce) will have finished the chapter.
- **Chapter 4: Verification procedure** (P3, P1, P6) - 6 pages, completed
- **Chapter 5: Applications of updating** (P4, P3, P5) – P4 (P. Tanner) - 20 pages
By the middle of April, P3 (D. Diamantidis) will have sent the 3 examples to P4 and P5 (P. Croce).
- **Chapter 6: Concrete structures** (P5, P4) – P5 (P.Croce) - 30 pages, almost completed
- **Chapter 7: Steel structures** (P5, P4) – 6-7 pages developed
Will be supplemented by examples from P4 (P.Tanner) and will have approx. 12 pages.
- **Chapter 8: Timber structures** (P5) – 20 pages, materials have to be finalized by P5 (P. Croce)
- **Chapter 9: Heritage structures** (P5, P7, ?) 30-35 pages, developed
- **Chapter 10: Rehabilitation of buildings against seismic actions** (P7) - 20 pages, P7 (Pamukkale University) strengthening of buildings
- **Chapter 11: Rehabilitation of bridges against seismic actions** (P5, P4, P7) P5, to be developed
strengthening of bridges
- **Chapter 12: Concluding remarks** (P5)
P1 (M.Holický) will send info concerning the development of ISO standard to P5 (P.Croce)

By 15/4/2013, each partner involved in a chapter should have sent his contribution to the “leader” of the chapter (i.e. the partner whose number is written in the first position in the brackets after the name of the chapter) and also to P5-P.Croce.

The “leader” of each chapter will incorporate everything, and distribute the draft of the chapter to all partners by 23/5/2013. These chapter drafts will then be finalized during the meeting in Denizli.

A draft copy of all the chapters will be made available to the meeting in Denizli. If the final draft of a chapter is not available 14 days before the meeting in Denizli, the chapter will be automatically excluded from Handbook 2.

Friday, March 15, 2013,
8:30 a.m. – 1:30 p.m.
3rd international project seminar

2:30 a.m. – 6 p.m.
Partners' meeting, 2nd part

5) Reflection of the seminar

Simultaneous translation into national languages is not needed.

It is desired to extend theoretical part, particularly the target reliability.

Practical examples should include references to the theoretical parts.

Future tendencies, recommendations for future developments should be indicated.

Legal aspects – how to persuade official bodies, local authorities. P4 (P.Tanner) will prepare an example of a forensic case to illustrate the risk factor.

6) Discussion of working materials in Handbook 3 (Roman Gottfried, Milan Holický)

CONTENTS

Foreword, to be developed later

- 1) **Introduction** (background materials, educational aspects, common practice, contents of HB3, basic principles of assessment) (P1,P2,P3), **draft being improved**
 - 2) **General framework of the assessment** (terminology, basic requirements for safety, serviceability and durability), (P1, M. Holický), **completed, distributed**
 - 3) **Procedures of assessment** (general procedure, testing, previous performance) (P2, V. Návarová) – **in the stage of terminology revision**
 - 4) **Methods for assessing buildings** (partial factors method, characteristic and design values, load combinations) (P1-M.Holícký, P2- R.Gottfried, P6-T.Vrouwenvelder), **completed and distributed**
 - 5) **Report on assessment** (ISO, HB1) (P1, P2), **draft being improved**
 - 6) **Examples** (P2, P1, P3, P4, P5), **to be taken from HB 2**
- Annex A. Statistical evaluation of data for the assessment** (materials, geometry, actions) (P1, M. Holický) **completed, distributed**
- Annex B. Partial factors method in assessment of existing structures**, early **draft already distributed**

Remaining parts should be completed by 31/05/2013.

After the book is published, 5 books (English version) will be delivered to each partner.

6) Meeting and seminar in Denizli, 06-07/6/2013 (P7, Selcuk Toprak, Mehmet Inel, Sevket Senel)

The meeting and seminar will be held at Pamukkale University on June, 6-7, 2013. P7 will send the partners a time schedule for the two days as well as the program of the seminar as soon as it is clear. Most probably, a half-day partners' meeting will be held on both Thursday and Friday. The seminar will be held on Thursday afternoon.

Each partner will bring his idea of the breakdown of expenditures expected to be incurred to the meeting in Denizli. This is so we can consider the possible reallocation of funds between partners (e.g. P2, P5 might exchange a part of his/her travel costs to other partners in return for money originally intended for “other costs” or “subcontracts”).

7) Meeting and seminar in Prague, 26-27/9/2013 (P1, M.Holický)

The meeting as well as the seminar will most probably be held in the Klokner Institute. The meeting will be held on Thursday, September 26, (2 – 6 p.m.), the seminar on the morning of Friday, September 27. P1 (J.Pallierová) will send the partners a time schedule of the two days, as well as the seminar program as soon as it becomes clear.

Pisa, 15/3/2013

Minutes prepared by P1 (J. Pallierová)